

(Animal Product Series, No. 4.)

THE
AGRICULTURAL LEDGER

1911—No. 2.

EDIBLE FROGS.

Edible Frogs in India.

BY I. H. BURKILL.

It is, I believe, not uncommon for frogs to be served up in the restaurants of Pondicherry. The species there used, Dr. Annandale tells me, is **Rana tigrina**. MADRAS FROGS.

Rana tigrina is also extensively used in Burma, where frogs under the name of Sa-hpa are sold in the Bazaars fresh and dried. Besides **Rana tigrina**, several other species are eaten in Burma, and some others are said to be eaten in Madras.

There is a note in Sir George Watt's "Chief Indian Animal Products" (Simla, 1902), page 55, that Mr. Thurston had seen frogs hung up for sale in the Cochin bazaar: and in the same place it is recorded, from the "Madras Mail" of August 1873, that the lower class people of Madras and Tinnevelly eat, besides **perla tavalei**, which is probably **Rana tigrina**, three others called **patchel tavalei**, **sori tavalei** and as the greatest of delicacies **manal tavalei**.

Dr. J. R. Henderson, Central Museum, Madras, has kindly sent me the following identifications.

**MADRAS
FROGS.**

"Patchei thavalai" (green frog) = **Rana hexadactyla**, Lesson, the common tank frog of Southern India.

"Sori thavalai" (itch frog) = **Bufo melanostictus**, Schneid., the common Indian toad, popularly believed to produce itch when handled.

"Munal thavalai" (sand frog) or "mun thavalai" (mud frog) = **Cacopusystoma**, Günth., the commonest of burrowing frogs in Madras."

Dr. Henderson thinks it doubtful if the two last are used as food, but in the light of what will be said later, it seems that they can be eaten, and it is, indeed, not unlikely that many more frogs than these are eaten in Madras by men who do not willingly acknowledge to it.

**BURMESE
FROGS.**

From Burma I have received the following names:—

Hpa-aing, or the mottled frog.

Hpa-baung-she.

Hpa-baung-zin, or the spangled frog.

Hpa-byan, or the flying frog.

Hpa-byok.

Hpa-da-det.

Hpa-gon-nyin.

Hpa-kyaw-zan-ke.

Hpa-la-det.

Hpa-nan-chaung.

Hpa-zaing, or the green frog.

Saung-hpa.

Thai-hpa.

Frogs in Burma if used fresh are boiled or curried, the head and intestines having been removed, and the skin taken off after the body has been dipped into hot water: or on other occasions the frog is prepared by having the intestines removed, being flattened between bamboo rollers and then smoked: and when required for eating it is fried or cooked in other ways. The sale price of a smoke-cured frog is about one arni.

Rana tigrina, as accepted by zoologists, is a very variable species, and apparently the Burmese have different names for different varieties, which require study before we understand them. The commonest frog seems to be that with a long thin white line from the mouth down the spine and with a relatively smooth skin. To it,

in Burma, the name Hpa-zaing seems to belong. The frog can be **BURMESE FROGS.** caught at any season.

Equally to naturalists the specimens sent to me as Hpa-boung-zin seem to be **Rana tigrina**, but my letters described it as of very different habits, burying itself in the banks of the paddy fields in the dry weather, and being taken when it has emerged after the first rains. The identity of Hpa-boung-zin is therefore somewhat doubtful. The name Hpa-boung-zin is of very wide use in Burma, and the frog is extensively eaten in almost every district that has sent reports.

Hpa-da-let, eaten in Minbu, is probably an immature state of Hpa-zaing. It is said not to be much relished and seldom sold at least in the Minbu district.

Hpa-boung-she is a frog of the same size as **Rana tigrina** which Dr. Annandale has named as **R. burkhilli** (Records of the Indian Museum, vol. v., 1910, page 79). It is somewhat warted, wants the long thin white line and is more obtuse in the snout. Specimens have been sent to me from Prome, Bassein and Tavoy—from Prome as Hpa-boung-she, from Bassein under the common name of Sa-hpa, and from Tavoy associated with the first form under the name of Hpa-zaing.

Hpa-da-let has been named for me by Dr. Annandale as **Rana limnocharis**. It is a frog by no means unlike **Rana tigrina** in appearance, having its somewhat acute snout, but differing in the white line down the back being broad. I have only received it from Prome.

Thai-hpa is a small species of Rana from Minbu, found about sandy streams and not much eaten. Probably it is immature. I have smoked bazaar specimens of Saung-hpa and Hpa-byau from Minbu, but cannot suggest a name for them. The first is a cold weather frog, not much sought after: the second is a very active whitish frog found during the rains and not much relished.

Hpa-gon-nyin is a name applied always to species of **Callula** and particularly to **C. pulchra**, Günth. The Burmese name has been received from several districts, viz., Minbu, Prome, Bassein and Mergui. It is a frog of the rains and collected about the paddy fields during the wet season. The Burmese name means the *Entada-scandens* frog—because its round dark body resembles the large dark-brown seed of **Entada scandens**. It is said to be eaten

BURMESE FROGS.

considerably in Prome. In the dried bazaar specimens of Hpa-nan-chuang from Minbu, which is all at my command of this frog, I can see no marks to distinguish it from ***Callula pulchra***, but judged by the note sent to me saying that it is collected at night by means of a light in May and June and is much sought after for eating (which Hpa-gon-nyin is not in Minbu), it must be different.

Hpa-aing of Minbu is a frog very unlike any others, recognised at once by its small head, for which Dr. Annandale has suggested the Genus ***Cacopus***. It is considered the best to eat of all the frogs and sells at Rs. 1.4 per viss of 3.65 lbs. It appears after the first showers of the rains in the jungle.

All the above are edible frogs, the toad Hpa-byok (***Bufo melanostictus***, Schneid.) is not reported as eaten in Burma and its skin is said to be poisonous; but Dr. Annandale believes that its flesh is eaten in Lower Siam.

FROGS FROM NEPAL.

Dr. Annandale informs me that a Nepāli recently was seen by him in Calcutta trying to sell a stock of dried ***Rana liebigii***, Günther, which he had collected, so he said, "from under the snows" in the mountains of Nepāl. The bodies are eviscerated and dried and a soup is made from them which has certain medicinal virtues.

FROGS OF THE NAGA HILLS.

Nāgās apparently regularly eat frogs. Mr. W. J. H. Ballantine, Haflong, informs me that the Nāgās and Rāngkhola and Jungsoen L'engta (or naked) Kukis in the North Cāchār Hills eat three species of frogs which are plentiful at the beginning of the rains. They are eaten freshly cooked, but if a large number are caught at a time, they are dried and kept and eaten like dried-fish.

The specimens of edible frogs sent by Mr. Ballantine were identified by Mr. S. W. Kemp as:—***Rana tigrina***, Daud., ***R. limnocharis***, Wieg., and ***Rhacophorus leucomystax***, Bouleng.

Frogs are also known to be eaten by the Chinese, at any rate in the north of China.

SUMMARY.

The zoologists who may refer to this note will find the following summary useful:—

Rana tigrina, Daud. More eaten than any other Indian frog and used in the French restaurants of Pondichery. It is called Peria tavalei in Madras, and Hpa-Zing, and perhaps Hpa-boung-zin in Burma. The tribes of North Cāchār eat it.

Ranaburkhilli, Annandale. A frog similar in size and appearance to *R. tigrina*, which is eaten in Burma under the name of Hpa-boung-she. SUMMARY.

Rana limnocharis, Weig. Similar in size to the last two, and eaten in Burma as well as by the tribes of the North Câchâr Hills. The Burmese call it Hpa-da-let.

Rana hexadactyla, Lesson, called patchei thavalei in Madras, is said there to be eaten.

Rana liebigii, Günth. Collected in Nepil, and made into a medicinal soup.

Rhacophorus leucomystax, Bouleng., is eaten by the tribes of the hills of North Câchâr.

Callula pulchra, Günth., is eaten in Burma under the name of Hpa-gon-nyin.

Cacopus systema, Günth., is the munal thavalei or mun thavalai said to be eaten in Madras.

A frog apparently belonging to the genus *Cacopus* is eaten in Central Burma and considered very good to eat. It has been received from Minbu under the name of Hpa-aing.

Bufo melanostictus, Schneid., is the sori thavalei or itch frog of Madras, and the Hpa-byok of Burma. It is reported by one writer as eaten in Madras.